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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,673	05/18/2001	Siew Yong Sim	72100.911D6	3662

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EXAMINER

NG, CHRISTINE Y

ART UNIT PAPER NUMBER

2663

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/681,673

Applicant(s)

SIM, SIEW YONG

Examiner

Christine Ng

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-20, 22-37 and 54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8, 11, 12, 20 and 22-37 is/are allowed.
- 6) ☒ Claim(s) 9, 10, 13-19, 42-47 and 51-54 is/are rejected.
- 7) ☒ Claim(s) 39-41 and 48-50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/10/05</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 5-8, 21, 25-28, 38 and 42-45 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17 and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "said first subset of block files" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 54 recites the limitation "said first subset of block files" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 9, 10, 13, 16-19, 47, 42, 46, 53 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,905,847 to Kobayashi et al.

Referring to claim 9, Kobayashi et al disclose a method for generating a large payload file from non-contiguous segments of block files comprising:

Receiving a request at a network node (Figures 1-2, administration computer 12) for a portion (Figures 1-2, video program 4) of a large payload file (Figure 2, video programs 1-6). Client 5a requests to see video 4 from a selection of videos 1-6. Refer to Column 6, lines 13-14 and lines 33-42; and Column 7, lines 52-57.

Obtaining information about assembling said portion of said large payload file, wherein said assembling information is included in a file metadata database (Figure 1, administration program 13) stored in a plurality of storage devices (Figures 1-2, magnetic disk units 31a,32a,31b,32b,31c,32c) associated with said node. Administration program 13 directs the reading of video 4 from each magnetic disk unit in sequential order, through the use of administration table (Figure 3). Refer to Column 6, lines 14-18 and lines 33-60; and Column 7, line 57 to Column 8, line 32.

Obtaining a plurality of block files (Figure 1, block n to block n+10) of said large payload file from said plurality of storage devices associated with said network node. Each video is stored by dividing the data and distributing the blocks over the plurality of magnetic disk units. Refer to Column 6, lines 33-42.

Creating a virtual representation of said portion of said large payload file from said plurality of block files using said assembling information. The video is virtual in that the user does not know that the video is stored over several magnetic disk units, not just one.

Transmitting said portion of said large payload file in response to said request. Each block of the video program 4 is read out to "sequentially hand over each block of the video program 4 stored in the server computers 2a-2c to the application program 6a". Refer to Column 8, lines 28-32.

Referring to claim 10, Kobayashi et al disclose that said block files are stored in non-contiguous form in said plurality of storage devices. As shown in Figure 1, block n+4 is stored in magnetic disk unit 32c and a sequential block, block n+5, is stored in magnetic disk unit 31a, where magnetic disk units 32c and 31a are not contiguous.

Referring to claim 13, refer to the rejection of claim 9. The method also comprises:

Said request having an offset into said large payload file and a length of said portion of said large payload file. As shown in Figure 2, each video program 1-6 has an offset telling where the particular video program begins within all 77 blocks. Figure 3 also shows a administration table including a head block no. which specifies which block is the first block of a particular video program and the length of the video program, or number of blocks. Refer to Column 6, lines 33-60.

Referring to claim 16, Kobayashi et al disclose that said representation comprises a virtual representation of said large payload file. Video program 4 contains 14 blocks (block 38 to block 51) of the total payload file of 77 blocks. Refer to Column 6, lines 33-60.

Referring to claim 17, Kobayashi et al disclose that said transmitting said large payload file commences when said first subset of block files resident in said node is

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adequate to start satisfying said request. Each block of the video program 4 is read out to "sequentially hand over each block of the video program 4 stored in the server computers 2a-2c to the application program 6a". Refer to Column 8, lines 28-32.

Referring to claim 18, refer to the rejection of claim 9.

Referring to claim 19, refer to the rejection of claim 9, claim 10, and claim 13.

Referring to claim 47, Kobayashi et al disclose an apparatus for generating a large payload file from non-contiguous segments of block files comprising:

A network (Figures 1-2, network 1) with a plurality of nodes.

A plurality of storage devices (Figures 1-2, magnetic disk units 31a,32a,31b,32b,31c,32c) in each of said plurality of nodes to store a plurality of block files (Figure 1, block n to block n+10) in non-contiguous form. As shown in Figure 1, block n+4 is stored in magnetic disk unit 32c and a sequential block, block n+5, is stored in magnetic disk unit 31a, where magnetic disk units 32c and 31a are not contiguous.

A first server (Figures 1-2, server computers 2a,2b,2c) in a first server cluster of a node of said network receiving a request for content (Figures 1-2, video program 4) of a large payload file (Figure 2, video programs 1-6), said first server cluster having one or more first servers (server computers 2a,2b,2c), said first server obtaining (from administration program 13) information about assembling said large payload file, said first server obtaining said plurality of block files of said large payload file from said plurality of storage devices (Figures 1-2, magnetic disk units 31a,32a,31b,32b,31c,32c) of said node; said first server creating a virtual representation of said large payload file

from said plurality of block files using said assembling information, and transmitting said large payload file in response to said request. Refer to the rejection of claim 9.

Referring to claim 42, Kobayashi et al disclose that the request is from an application (application programs 6a-6d) serving a client request (from client computers 5a-5d). Refer to Column 5, line 62 to Column 6, line 3.

Referring to claim 46, Kobayashi et al disclose that said assembling information is contained in a file metadata database (administration program 13) stored in said plurality of storage device of said node. Administration program 13 directs the reading of video 4 from each magnetic disk unit in sequential order, through the use of administration table (Figure 3). Refer to Column 6, lines 14-18 and lines 33-60; and Column 7, line 57 to Column 8, line 32.

Referring to claim 53, Kobayashi et al disclose that said representation is a virtual representation of said large payload file. The video is virtual in that the user does not know that the video is stored over several magnetic disk units, not just one.

Referring to claim 54, Kobayashi et al disclose that said transmitting said large payload file commences as soon as said first subset of block files resident in said node is adequate to start satisfying said request. Each block of the video program 4 is read out to "sequentially hand over each block of the video program 4 stored in the server computers 2a-2c to the application program 6a". Refer to Column 8, lines 28-32.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 15, 43-45, 51 and 52 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,905,847 to Kobayashi et al.

Referring to claims 14 and 51, Kobayashi et al do not specifically disclose that said plurality of block files comprises a first subset of block files resident at said node at receipt of said request and a second subset of block files not resident at said node at receipt of said request, wherein both subsets represent the entire large payload file.

However, Kobayashi et al disclose that when one server computer stores a video program, the capacity of the system decreases when there is a plurality of accesses on a certain video program since there is an overload on the server computer holding the video program. To solve this program, the video program can be distributed among several server computers to decrease the workload on particular computer. Refer to Column 1, lines 48-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that said plurality of block files comprises a first subset of block files resident at said node at receipt of said request and a second subset of block files not resident at said node at receipt of said request, wherein both subsets represent the entire large payload file. One would be motivated to do so in order to "improve the efficiency of the whole system, even if there is a rush of access to a certain program" (Column 1, lines 64-65).

Referring to claims 15 and 52, Kobayashi et al do not specifically disclose one or more second servers in a second server cluster, and said first server sending a second



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request to a second server of said one or more second servers to obtain said second subset of block files from other nodes of said network.

However, since the video program is distributed among several server computers, all parts of the video program need to be obtained in order for the program to be displayed in its entirety. Refer to Column 1, lines 48-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include one or more second servers in a second server cluster, and said first server sending a second request to a second server of said one or more second servers to obtain said second subset of block files from other nodes of said network. One would be motivated to do so in order to assemble the entire video program to the user.

Referring to claims 43-45, Kobayashi et al do not disclose that application is a streaming server, a FTP host or a media player.

However, Kobayashi discloses in Figure 1 that the client computers 5a-5d can receive video programs and contain application programs 6a-6d. A client computer can launch other applications such as a streaming server, an FTP host or a media player. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the application is a streaming server, a FTP host or a media player; the motivation being to accommodate the various media types that may be loaded by the client computer to play a video.

***Allowable Subject Matter***

8. Claims 2-8, 11, 12, 20 and 22-37 are allowed.

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9. Claims 39, 40, 41, 48, 49 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

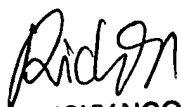
**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng CW  
July 29, 2005

  
RICKY NGO  
PRIMARY EXAMINER

8/5/05